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## NOTES ON THE PIRO LANGUAGE

By JOHN P. HARRINGTON

THE Piro Indians are and have been since known to history the most southerly of the sedentary Pueblo tribes. They were the first Pueblo people encountered by the early Spanish explorers when they journeyed up the Rio Grande. Indeed archeology seems to indicate that the southern limit of the architecture typical of the Pueblo area is coincident with the southern extent of the country occupied by the Piro when first discovered by the whites in the sixteenth century.<sup>1</sup>

This former Piro homeland lay in what is now the central part of New Mexico. In more than twenty villages, these Indians held the valley of the Rio Grande from the vicinity of the present La Joya to that of the present San Marcial, a distance of more than forty miles, and also a great arid area east of the river in the region which is known because of its alkali lakes as Las Salinas. As early Piro villages whose names have become widely known may be mentioned Senecú, Socorro, and Gran Quivira.

The neighbors of the Piro on the north were the ancestors of the present Sandia and Isleta Indians. This tribe, and more especially its language, are sometimes designated by a name, obscure in origin, which is variously spelled Tigua, Tiwa, but pronounced Tíwa. The application of the name Tiwa was extended at an early date to the Taos and Picuris Indians of northern New Mexico, who speak a slightly variant form of the language of Sandia and Isleta.<sup>2</sup> These northern neighbors were no doubt a people very similar in

<sup>1</sup> Bandelier, Final Report, *Papers of the Archaeological Institute of America*, Am. Ser., IV, Cambridge, 1892, pt. II, p. 252.

<sup>2</sup> Alonso Benavides is the first writer who observes that the Indians of Taos and Picuris are closely related linguistically to the Tiwa. In his *Memorial* (Madrid, 1630, p. 30) he notes concerning the Picuris: "And although these Indians are of Tioas [i. e., Tiwa] tribe, since they are so widely separated from them, they are entirely independent of them." Of the Taos he says, "of the same tribe as the preceding, but the language differs somewhat."

every way to the Piro themselves. On the west, south, and east, and to some extent between the Piro villages, roved hostile Apache. More remote southern and eastern neighbors of the Piro were the semi-sedentary Jumanos, Mansos, and Sumas, of undetermined affinities.

At the time of the great Pueblo rebellion the Piro were already greatly decreased in number, probably largely as a result of increasingly violent inroads of the Apache. They accompanied the retreating governor of New Mexico, Otermin, as far south as El Paso del Norte. At a spot seven miles below the present city of El Paso, on the southwestern bank of the Rio Grande, a new Piro village of Senecú was established, and a second Socorro was founded seven miles farther down the river on the opposite bank. At and about these two places are still to be found at the present day forty or more individuals who call themselves Piro and continue the governmental organization of the Piro tribe, although they have adopted the language and culture of the Mexicans.

The two Piro villages near El Paso were established in 1680. In the following year a large number of Indians from Isleta pueblo were settled on the bank of the Rio Grande two miles above Socorro, and their village became known as Isleta or Isleta del Sur. These southern Isleta are at present somewhat less thoroughly Mexicanized than are the descendants of the Piro.

Piro history suggests that we have to deal with a tribe distinct from all others. We must therefore not be surprised to discover, in linguistic groupings which are based to a considerable extent on other than linguistic data, that Piro is considered a distinct language. It is interesting to examine the history of the classification of Piro.

Gregg writes, 1844: "In ancient times the several pueblos formed four distinct nations, called the Piro, Tegua, Queres, and Tagnos or Tanos, speaking as many different dialects or languages."<sup>1</sup> Here the Tanos (Tagnos) are separated from the Tewa (Tegua), although they spoke the same language, and the Keres (Queres) are introduced among tribes speaking languages of the Tanoan family.

Lane, 1854, groups together as belonging to a single linguistic

<sup>1</sup> Gregg, *Commerce of the Prairies*, Philad

1844, vol. I, p. 269.

stock the idioms of Taos, Vicuris (i. e., Picuris), Zesuqua (i. e., Tesuque), Sandia, Ystete (i. e., Isleta), and of "two pueblos near El Paso, Texas." This family he terms E-nagh-magh.<sup>1</sup> The tongues which he enumerates are all of the stock which has since Powell been known as the Tanoan family. The two pueblos near El Paso are probably Senecú and Isleta del Sur. They are however identified by Keane with "Lentis" and "Socorro."<sup>2</sup>

Pimentel, 1862-65, classifies the Pueblo languages as follows: "I. El Keres, Queres, Xeres, Quera dividido en tres dialectos Kiwomi ó Kioame, Cochitemi ó Quime, Acoma ó Acuco. II. El Tesuque ó Tegua, Tehua, Tigua, Tiguex. III. El Taos, Tahos, Thaos ó Piro, Pira, Tom-pira hablado por los Taos, Piros, Sumas, Pecuries ó Picoris. IV. El Jemez, Gemez, Xemez ó Tano, Tagno, Tahano correspondiente á los Jemez, Tanos y Pecos. V. El Zuñi, Zoñi ó Cíbola."<sup>3</sup> Pimentel's groups II, III and IV include the languages of the Tanoan family. These three groups are however not recognized as resembling one another more closely than they do I, the Keres stock, and V, the Zuñian stock. In group II the Tewa and Tiwa are confused and classed together. Group III is very interesting, for it connects the Taos-Picuris, Piro, and Suma languages. In group IV the Tano, identical with the Tewa, is incorrectly grouped with the Jemez-Pecos language.

Powell, 1880, distinguishes Zuñian, Keresan, and Tanoan<sup>4</sup> speech and gives the names to these three linguistic stocks. The divisions of the Tanoan stock are grouped by him thus: "1, Taño (Isleta, Isleta near El Paso, Sandia). 2, Taos (Taos, Picuni). 3, Jemes (Jemes). 4, Tewa or Tehua (San Ildefonso, San Juan, Pojoaque, Nambe, Tesuque, Santa Clara, and one Moki Pueblo). 5, Piro."<sup>5</sup> Powell makes a very noticeable mistake in separating the Taos-Picuris from the Isleta-Sandia language and in calling the latter "Taño."

<sup>1</sup> Lane, 1854, in Schoolcraft, *Indian Tribes*, Philadelphia, 1855, vol. v, p. 689.

<sup>2</sup> See Powell, *Indian Linguistic Families of America North of Mexico*, Washington, 1891, p. 121.

<sup>3</sup> Pimentel, *Lenguas Indígenas de México*, Mexico, 1862-65, p. 92.

<sup>4</sup> Powell incorrectly writes Taño, Tañoan. The name in Mexican is Tano; in Tewa, T<sup>h</sup>anu. I follow Hodge in omitting the tilde from the word.

<sup>5</sup> Powell in *American Naturalist*, Aug., 1880.

Bancroft, 1883, in his discussion of the Pueblo languages does not mention Piro; but he says: "In Taos, Picoris, Zandia, and Isleta, there is the Picoris language."<sup>1</sup> In chapter VII however he speaks of the "Hualahuise, Julime, Piro, Suma, and Chinarra" as north Mexican languages and reprints a Piro version of the Lord's Prayer.<sup>2</sup>

Bandelier, 1892, says of the Tiwa and Piro: "The language spoken by these two tribes is related to the idioms of the Tehuas, consequently also of the Tanos, Taos, Picuris, and Jemez. The Tigua language is virtually the same as that spoken at Taos and Picuris, the difference not being greater than between the dialects of southern Germany and those of some of the northern cantons of Switzerland . . . The Piros as far as I know have no kindred in the northern parts of the Southwest; except in as far as their idiom is shown to be related to those of the tribes specified above . . . Although the Piros and Tiguas were not able to understand each other's speech, they were near neighbors on the Rio Grande."<sup>3</sup>

Hodge writes, 1896: "The Pueblo tribes of New Mexico and Arizona embody four linguistic stocks — Tanoan, Keresan, Zuñian, and Shoshonean. The Tanoan stock is, or rather was, composed of five dialectal divisions — Tano, Tewa, Tiwa, Jemez, and Piro. . . . The Tiwa, called by the Spaniards Tigua, live in the pueblos of Taos, Picuris, Sandia and Isleta. . . . The Piros, now almost completely Mexicanized, are found, intermixed with some Tiwa, at the villages of Senecú and Isleta del Sur, below El Paso on the Rio Grande in Texas and Chihuahua."<sup>4</sup>

The Tano should be omitted, being included in the Tewa.

Concerning the Piro there seems to be a difference of opinion. Lane, Pimentel, Powell, Bandelier, and Hodge agree in grouping Piro with the Tanoan languages. They differ when a closer or more remote connection with certain languages within the Tanoan family is attempted. Pimentel classes the Piro with the Taos, Pi-

<sup>1</sup> Bancroft, *Native Races*, San Francisco, 1883, vol. III, p. 681.

<sup>2</sup> *Ibid.*, p. 714. The Lord's Prayer is reprinted from the *Colección Polidíomica que contiene la Oración Dominical*, Mexico, 1860, p. 36, and is reproduced in the introduction to the Bartlett vocabulary of Piro in the last number of this journal, p. 429.

<sup>3</sup> Bandelier, *Final Report*, Cambridge, 1892, pt. II, pp. 218 and 219.

<sup>4</sup> Hodge, Pueblo Indian Clans, *American Anthropologist*, Oct., 1896, p. 345.

curis, and Suma. Powell, Bandelier, and Hodge consider Piro to be a language or division of the Tanoan family distinct from all others.

From what sources are these classifications derived, we may rightly ask? What sources are available for a study of the Piro language? The sources of our knowledge of the language itself are four in number.

1. A few place names. The orthography is Spanish. Those recorded by Bandelier<sup>1</sup> are: Abo (= Abbo), Atri-puy, Genobey (= Xenopué?), Pataotrey, (= Patasce?), Pil-abó (= Pil-o Pué), Qual-a-cú, Quelotetrey (= Cuéloce?), Tabirá (= Gran Quivira), Ten-abó, Tey-pam-á, Trenaquel, Zen-ecú (= Senecú = Tzen-o-cué).

2. A Piro version of the Lord's Prayer. The orthography is Spanish. The collector is not known. It was first printed in the *Colección Polidiómica Mexicana que contiene la Oración Dominical*, Mexico, 1860, p. 36. It is reprinted with twelve mistakes by Bancroft<sup>2</sup> and correctly in the *American Anthropologist*, July-Sept., 1909, p. 429.

3. A brief vocabulary recorded by Mr John Russell Bartlett in 1850, preserved in the archives of the Bureau of American Ethnology. It is published, together with a sketch of Piro history by Mr F. W. Hodge, and some notes on the Piro vocabulary by Bartlett, in the *American Anthropologist*, Oct., 1909, p. 426.

4. A brief vocabulary obtained by Mr James Mooney in 1897. This is also in possession of the Bureau of American Ethnology and has not yet been published.

This material, wretched in quality as it is meager in scope, not only is, but may remain, our only record of Piro speech. Bartlett in 1850 had apparently no difficulty in obtaining a vocabulary from the Piro. He employed two Indians residing at Senecú named Hieronymo Peraza and Marcos Alejo. Mr Mooney obtained his Piro material from an old woman said to be the last survivor who had any knowledge of the native tongue.<sup>3</sup> Dr Fewkes states after

<sup>1</sup> Bandelier, *Final Report*, Cambridge, 1892, chap. VI.

<sup>2</sup> Bancroft, *Native Races*, San Francisco, 1883, vol. III, p. 714.

<sup>3</sup> According to information furnished by Mr F. W. Hodge.

visiting the Piro in 1901: "The Piro language, as a means of conversation, has practically disappeared, as no one at Senecú or Socorro now converses in it; but there are still remembered many words which, if recorded, would form a larger vocabulary than any known to exist."<sup>1</sup> Mr Hodge writes of the Piro in 1909: "They are 'Mexicans' to all intents and purposes, and perhaps only one or two have any remembrance of their native language."<sup>2</sup>

Concerning the extinctness of this language, as concerning its affinities, our authorities differ.

In August of this year the writer of the present paper determined to visit the Piro. His stay among them was brief and the results were unsatisfactory. A few details will, however, be of interest.

Senecú may be reached from El Paso after a walk of two hours. The pleasant road leads through Juarez, which has the distinction of being the Mexican town most visited by people from the United States, and further, between the small farms which dot the broad, low bank of the river, until it passes the old church of Senecú. If it were not for the church one would hardly know when Senecú is reached, for the river bank is not more thickly populated here than all along the way.

The first person interviewed concerning the Piro at Senecú was a kindly disposed old man named Marcos Pedraza. He answered my first inquiry in jest, saying that I must mean "perros," dogs, since there were neither Piro nor Indians at Senecú. Later he admitted that he was himself a Piro. He and his wife received me with Mexican hospitality and answered my questions with a frankness which contrasted sharply with the reticence of the Pueblo Indian. Neither he nor his wife could remember a word of the Piro language, although they tried hard and were offered every inducement to do so. They told me that they did not dare to fabricate words since I would ask other Indians (they were not thinking of Piro Indians when they said this!) and discover their lies.

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<sup>1</sup> Fewkes, The Pueblo Settlements near El Paso, Texas, *American Anthropologist*, Jan., 1902, p. 74.

<sup>2</sup> Hodge, The Language of the Piro, by John Russell Bartlett, Introduction, *American Anthropologist*, July-Sept., 1909, p. 428.

Marcos Pedraza said that his father, now dead, could speak Piro, but never did so, because the language was of no use. In former years he had heard his father and other people speak in Indian, but he did not understand them. He declared emphatically that he and the rest of the Indians of Senecú know no language but Spanish. He assured me again and again that I would be unable to discover any one who knows Piro. The old people who knew the language had all gone to the skies. Those last surviving had died ten or fifteen years before. One of these was Marcos Alejo—the name of one of Bartlett's informants! My informant did not like to talk about these people of former years. In a second talk with him, held in his chile field, he told me that there were Isleta people at Isleta across the river who still knew Indian and advised me to go to Mariano Colminero, “el cacique de los Tiguas.” When I objected that the Isleta language is different from Piro, he said, and I quote his very words, “No, no, es cuasi la misma idioma”—“No, no, it is as it were the same language.” He said that the Isleta and Piro people were old friends and allies and that they had no difficulty in talking together in Indian, the two languages being very much alike.<sup>1</sup> My informant pronounced the name Senecú, Sa-ne-kú,<sup>2</sup> and Piro was spoken as the Mexicans speak it with a strongly trilled *r*. I could obtain no satisfactory information from him about the Suma. He thinks that there are about forty people at Senecú, none of whom are “more Indian” than he is. He knows a couple of families of Piro settled about Isleta and Socorro on the Texas side of the river; also two or three Piros living at various places in Chihuahua south of Senecú, a Piro man named Vicente Pais who has a ranch at San José, Texas, and two other men of the tribe, Dolores Alejo and Alexandro Rodela, living at Las Cruces, New Mexico. He stated in a convincing manner that none of these men know the Piro language.

I visited altogether six Piro homes at Senecú, and had pointed out to me the farm of the married daughter of Hieronymo Pedraza,

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<sup>1</sup> This statement, whatever importance may be attached to it, directly contradicts Bandelier, who states that “the Piros and Tiguas were not able to understand each other's speech.” See the quotation from Bandelier, p. 566, of this article.

<sup>2</sup> It was noticed that a Mexican at El Paso also pronounced the name thus.



Bartlett's informant, who died twenty-five years ago. None of the people could assist me at all in my quest for Piro words, although they were all friendly. A second old man, named Caspillo, confirmed Marcos Pedraza's statements. This man was of the opinion that I might find people on the other side of the river who could give me Piro words. Piro was, he said, as compared with Tiwa, "poco diferente,"—a little different,—which after all is a rather meaningless phrase.

To conclusively determine whether individuals exist who retain a knowledge of Piro may prove to be a task of weeks or months. It can hardly be urged strongly enough that a thorough and systematic search, such as the writer did not have time to make, be conducted without delay.<sup>1</sup>

At Isleta del Sur I secured the services of Mariano Colminero whom the Piro had recommended to me. I found him to be a man of unusual intelligence. He had previously worked with an ethnologist whom I judge from his description to be Dr Fewkes. This man and a number of other old people can converse in the Isleta language. He said that the Piro idiom was different from that of Isleta, but only in minor details, many of the words being the same. Whether Piro is still spoken he does not know. He thought that Vicente Pais, who lives near Isleta, might know Piro. An attempt to find this man was unsuccessful.

With the assistance of Mariano and of an aged neighbor of his named Ponciano Luin<sup>2</sup> I recorded the Isleta del Sur equivalents of the words contained in Bartlett's Piro vocabulary. No reference was made to the Piro words while obtaining this vocabulary.

Later I discovered that the Tiwa words which I had obtained at Isleta del Sur had in the majority of cases stems identical with those of Bartlett's Piro. At once I determined to prepare corresponding vocabularies in the Tiwa of Isleta del Norte and of Taos, and in the Jemez and Tewa languages, and thus to compare and analyze the Piro.

<sup>1</sup> Dr Fewkes informs me that he is of the opinion that such a search might prove successful. After his visit to the Piro in 1901 he heard of an old man at Socorro who still spoke Piro.

<sup>2</sup> Perhaps a mistake for Ponciano Olgin, a name mentioned by Fewkes, The Pueblo Settlements Near El Paso, Texas, *American Anthropologist*, Jan., 1902, p. 62.

The day after obtaining the Isleta del Sur vocabulary and while its sounds were still remembered I secured at Albuquerque words of corresponding meaning from an Isleta woman named María Chotal. The slight phonetic and lexic differences between the Isleta dialect and that of Isleta del Sur are what one would expect, since the separation occurred more than two centuries ago. On the whole, I imagine that the southern Isleta tongue is the more conservative of the two. The Isleta vocabulary has been compared with Gatschet's Isleta text<sup>1</sup> and has been revised by Dr H. J. Spinden, to whom I am indebted for this assistance. The Taos vocabulary was recorded from José Lopez and Santiago Mirabal; the Jemez informants were Pedro Coloqui, Cristino Yepa, and José M. Toledo; the San Ildefonso Tewa words were obtained from Ignacio Aguilar. These vocabularies are herewith presented.

The alphabet used in the vocabularies is with modifications that employed by Dr J. R. Swanton of the Bureau of American Ethnology. Modifications are :

*e* is a rapidly uttered, impure *e*.

    indicates a very open vowel.

<sup>h</sup> denotes aspiration of the preceding sound.

<sup>g</sup> signifies closure of the glottis.

<sup>h</sup> is a very slight *h*.

*fw* resembles the English *wh*.

*v* is bilabial *v*.

*b, d, g* approximate *v, r, y*.

*m, n* are *m, n* without complete closure.

<sup>ˈ</sup> indicates stress accent.

<sup>ˋ</sup> indicates a falling or lowering pitch accent.

: indicates that the pitch of the preceding vowel is lower than the sentence pitch.

· indicates that the pitch of the preceding vowel is higher than sentence pitch.

Abbreviations used are : *I. S.*, Isleta del Sur ; *I.*, Isleta ; *T.*, Taos ; *J.*, Jemez ; *S. I.*, San Ildefonso ; *O.* Oración Dominical.

<sup>1</sup> Gatschet, A Mythic Tale of the Isleta Indians, New Mexico, *Proceedings of the American Philosophical Society*, July-Dec., 1891, pp. 208-218.

## Comparative Vocabulary of the Tanoan Languages

English	Piro (Bartlett) ("Piro")	Isleta del Sur ("Tiwa")	Isleta ("Tiwa")	Taos ("Tiwa")	Jemez ("Jemez")	San Ildefonso ("Jewa")
1. Old man	o-ye		sōonide	sōanenà	zela	se <sup>a</sup> ndo
2. Old woman		sōonide	Liudade		col	se <sup>a</sup> n
			Liude		owà	kwiyo
Woman in prime						
3. Youth	su-n'é	Liudaidé	Liudade	Liuenà	tyo	kwi
Boy	at-sam-é		Luwade	ulāiānà	ākizw	enu
Little boy			Luwauide	uyuunà	ākizw	enuke
4. Maiden		uiide	uude	uunà	k <sup>i</sup> aw	enuke
Girl	yool-é		'caide	kwōlenà	u <sup>a</sup> pekizw	anyu
Little girl		uiide	'caude	upānyuunà	u <sup>a</sup> pekizw	anyuke
5. Infant	yu-wa-né	uiide	upiuide	uunà	k <sup>i</sup> aw	anyuke
			uude	uunà	k <sup>i</sup> aw	ep'i
				up'ilenà	k <sup>i</sup> awee	ep'ie
				up'iluunà	k <sup>i</sup> awwilla	
6. Father, my	el em-ta-té	i <sup>a</sup> nkaiwae	i <sup>a</sup> nkai	a <sup>a</sup> ntamenà	n <sup>i</sup> uto <sup>a</sup> e	na <sup>a</sup> bi-tada
			i <sup>a</sup> ntataey			
Father!	quitatāc (O)				tata	tada
7. Mother, my	et-em-kia-é	i <sup>a</sup> nkawae	i <sup>a</sup> nkey	a <sup>a</sup> nkana	n <sup>i</sup> uuzee	na <sup>a</sup> bi-yiya
			i <sup>a</sup> nmamaey			
Mother!					'iya	yiya
8. Husband, my	el-a-man-tsal-a-é	i <sup>a</sup> nsōaue	i <sup>a</sup> nsōey	a <sup>a</sup> nLolinà	na <sup>a</sup> bi-se <sup>a</sup> n	na <sup>a</sup> bi-t'owa
					na <sup>a</sup> bi-t'owa	na <sup>a</sup> bi-kwi
9. Wife, my	el-a-m'sun-é	i <sup>a</sup> nLiuee	i <sup>a</sup> nliuey	a <sup>a</sup> nLitonà	na <sup>a</sup> bi-t'owa	na <sup>a</sup> bi-t'owa
					na <sup>a</sup> bi-e	na <sup>a</sup> bi-e
10. Son, my	el-a-m'eu-i-é	i <sup>a</sup> nuwae	i <sup>a</sup> nuuey	a <sup>a</sup> nuwai	n <sup>i</sup> uakizok'ae	na <sup>a</sup> bi-e
11. Daughter, my	el-a-m'eu-i-sun-é	i <sup>a</sup> mpiuwae	i <sup>a</sup> mpiuey	a <sup>a</sup> npiuwai	n <sup>i</sup> uup <sup>a</sup> pekizok'ae	na <sup>a</sup> bi-e
12. Elder brother, my	el-a-m'pu-pu-é	i <sup>a</sup> mpapaue	i <sup>a</sup> mpapey	a <sup>a</sup> npapanà	n <sup>i</sup> upapōe	na <sup>a</sup> bi-paude

	Younger brother, my	Younger sister, my	Indian, people	Head	Hair	Face	Forehead	Ear	Eye	Nose	Mouth	Tongue	Teeth	Beard	Neck	Arm	Hand	Fingers	Nails	Body	Leg	Foot	Toes	Bone	Heart	Blood	Village
13.	Elder sister, my	el-a-m'qu-qò-é	a-tsi-hem	pi-nēm	sa-na-é	tso-hēm	tsi-kia-nēm	tah-so-hēm	tsi-hio-né-que	fu-é	sa-na-é	mi-n'é	we-yé	tso-fa-hé	youl-wa-hem	hiá-hem	ma-nem	man-hio-né	man-sa-si-hé	el-en-cuerpo-é	pe-sa-hém	a-nēm	an-hio-né	ou-an-ém	pe-n'é	u-hém	tai-hone-a-é
14.	Younger sister, my		a-tsi-hem	pi-nēm	sa-na-é	tso-hēm	tsi-kia-nēm	tah-so-hēm	tsi-hio-né-que	fu-é	sa-na-é	mi-n'é	we-yé	tso-fa-hé	youl-wa-hem	hiá-hem	ma-nem	man-hio-né	man-sa-si-hé	el-en-cuerpo-é	pe-sa-hém	a-nēm	an-hio-né	ou-an-ém	pe-n'é	u-hém	tai-hone-a-é
15.	Head		pi-nēm	sa-na-é	tso-hēm	tsi-kia-nēm	tah-so-hēm	tsi-hio-né-que	fu-é	sa-na-é	mi-n'é	we-yé	tso-fa-hé	youl-wa-hem	hiá-hem	ma-nem	man-hio-né	man-sa-si-hé	el-en-cuerpo-é	pe-sa-hém	a-nēm	an-hio-né	ou-an-ém	pe-n'é	u-hém	tai-hone-a-é	
16.	Hair		sa-na-é	tso-hēm	tsi-kia-nēm	tah-so-hēm	tsi-hio-né-que	fu-é	sa-na-é	mi-n'é	we-yé	tso-fa-hé	youl-wa-hem	hiá-hem	ma-nem	man-hio-né	man-sa-si-hé	el-en-cuerpo-é	pe-sa-hém	a-nēm	an-hio-né	ou-an-ém	pe-n'é	u-hém	tai-hone-a-é		
17.	Face		tso-hēm	tsi-kia-nēm	tah-so-hēm	tsi-hio-né-que	fu-é	sa-na-é	mi-n'é	we-yé	tso-fa-hé	youl-wa-hem	hiá-hem	ma-nem	man-hio-né	man-sa-si-hé	el-en-cuerpo-é	pe-sa-hém	a-nēm	an-hio-né	ou-an-ém	pe-n'é	u-hém	tai-hone-a-é			
18.	Forehead		tsi-kia-nēm	tah-so-hēm	tsi-hio-né-que	fu-é	sa-na-é	mi-n'é	we-yé	tso-fa-hé	youl-wa-hem	hiá-hem	ma-nem	man-hio-né	man-sa-si-hé	el-en-cuerpo-é	pe-sa-hém	a-nēm	an-hio-né	ou-an-ém	pe-n'é	u-hém	tai-hone-a-é				
19.	Ear		tah-so-hēm	tsi-hio-né-que	fu-é	sa-na-é	mi-n'é	we-yé	tso-fa-hé	youl-wa-hem	hiá-hem	ma-nem	man-hio-né	man-sa-si-hé	el-en-cuerpo-é	pe-sa-hém	a-nēm	an-hio-né	ou-an-ém	pe-n'é	u-hém	tai-hone-a-é					
20.	Eye		tsi-hio-né-que	fu-é	sa-na-é	mi-n'é	we-yé	tso-fa-hé	youl-wa-hem	hiá-hem	ma-nem	man-hio-né	man-sa-si-hé	el-en-cuerpo-é	pe-sa-hém	a-nēm	an-hio-né	ou-an-ém	pe-n'é	u-hém	tai-hone-a-é						
21.	Nose		fu-é	sa-na-é	mi-n'é	we-yé	tso-fa-hé	youl-wa-hem	hiá-hem	ma-nem	man-hio-né	man-sa-si-hé	el-en-cuerpo-é	pe-sa-hém	a-nēm	an-hio-né	ou-an-ém	pe-n'é	u-hém	tai-hone-a-é							
22.	Mouth		sa-na-é	mi-n'é	we-yé	tso-fa-hé	youl-wa-hem	hiá-hem	ma-nem	man-hio-né	man-sa-si-hé	el-en-cuerpo-é	pe-sa-hém	a-nēm	an-hio-né	ou-an-ém	pe-n'é	u-hém	tai-hone-a-é								
23.	Tongue		mi-n'é	we-yé	tso-fa-hé	youl-wa-hem	hiá-hem	ma-nem	man-hio-né	man-sa-si-hé	el-en-cuerpo-é	pe-sa-hém	a-nēm	an-hio-né	ou-an-ém	pe-n'é	u-hém	tai-hone-a-é									
24.	Teeth		we-yé	tso-fa-hé	youl-wa-hem	hiá-hem	ma-nem	man-hio-né	man-sa-si-hé	el-en-cuerpo-é	pe-sa-hém	a-nēm	an-hio-né	ou-an-ém	pe-n'é	u-hém	tai-hone-a-é										
25.	Beard		tso-fa-hé	youl-wa-hem	hiá-hem	ma-nem	man-hio-né	man-sa-si-hé	el-en-cuerpo-é	pe-sa-hém	a-nēm	an-hio-né	ou-an-ém	pe-n'é	u-hém	tai-hone-a-é											
26.	Neck		youl-wa-hem	hiá-hem	ma-nem	man-hio-né	man-sa-si-hé	el-en-cuerpo-é	pe-sa-hém	a-nēm	an-hio-né	ou-an-ém	pe-n'é	u-hém	tai-hone-a-é												
27.	Arm		hiá-hem	ma-nem	man-hio-né	man-sa-si-hé	el-en-cuerpo-é	pe-sa-hém	a-nēm	an-hio-né	ou-an-ém	pe-n'é	u-hém	tai-hone-a-é													
28.	Hand		ma-nem	man-hio-né	man-sa-si-hé	el-en-cuerpo-é	pe-sa-hém	a-nēm	an-hio-né	ou-an-ém	pe-n'é	u-hém	tai-hone-a-é														
29.	Fingers		man-hio-né	man-sa-si-hé	el-en-cuerpo-é	pe-sa-hém	a-nēm	an-hio-né	ou-an-ém	pe-n'é	u-hém	tai-hone-a-é															
30.	Nails		man-sa-si-hé	el-en-cuerpo-é	pe-sa-hém	a-nēm	an-hio-né	ou-an-ém	pe-n'é	u-hém	tai-hone-a-é																
31.	Body		el-en-cuerpo-é	pe-sa-hém	a-nēm	an-hio-né	ou-an-ém	pe-n'é	u-hém	tai-hone-a-é																	
32.	Leg		pe-sa-hém	a-nēm	an-hio-né	ou-an-ém	pe-n'é	u-hém	tai-hone-a-é																		
33.	Foot		a-nēm	an-hio-né	ou-an-ém	pe-n'é	u-hém	tai-hone-a-é																			
34.	Toes		an-hio-né	ou-an-ém	pe-n'é	u-hém	tai-hone-a-é																				
35.	Bone		ou-an-ém	pe-n'é	u-hém	tai-hone-a-é																					
36.	Heart		pe-n'é	u-hém	tai-hone-a-é																						
37.	Blood		u-hém	tai-hone-a-é																							
38.	Village		tai-hone-a-é																								

na<sup>n</sup>bi-tiu  
 na<sup>n</sup>bi-pade  
 na<sup>n</sup>bi-tiu  
 t'ówa  
 p'o·  
 p'ho·  
 ts'éwe  
 tsigro  
 oye  
 tsi·  
 hyu:  
 so  
 há<sup>n</sup>n  
 nwā  
 sofo  
 k'e  
 k'bo  
 man<sup>n</sup>  
 ma<sup>n</sup>zk<sup>h</sup>u<sup>n</sup>  
 ma<sup>n</sup>nyā  
 tuu  
 k<sup>h</sup>u<sup>n</sup>  
 po  
 o<sup>n</sup>n  
 o<sup>n</sup>z<sup>h</sup>a  
 p'le-k<sup>h</sup>u<sup>n</sup>  
 pi<sup>n</sup>n  
 u<sup>n</sup>  
 u<sup>n</sup>p'ó:  
 o<sup>n</sup>wi

ni<sup>n</sup>upetue  
 ni<sup>n</sup>ukok'ae  
 ni<sup>n</sup>up'ae  
 t'á'ac  
 ts'oc  
 fwolá  
 ts'oc  
 wápe  
 wátye  
 se  
 fwose  
 tyekwá  
 i<sup>n</sup>z  
 kwu<sup>n</sup>  
 ndá/wá  
 tó  
 hà  
 man<sup>n</sup>  
 ma<sup>n</sup>te  
 ma<sup>n</sup>  
 ma<sup>n</sup>so<sup>n</sup>  
 kwálö  
 ho<sup>n</sup>  
 o<sup>n</sup>t'ac  
 o<sup>n</sup>tcu(ma<sup>n</sup>so<sup>n</sup>)  
 ho<sup>n</sup>c  
 pe<sup>n</sup>  
 u<sup>n</sup>  
 u<sup>n</sup>p'á  
 tówa

a<sup>n</sup>np'ainà  
 a<sup>n</sup>ntotunà  
 a<sup>n</sup>np'ayuuna  
 t'áinéma<sup>n</sup>  
 p'inéma<sup>n</sup>  
 p'<sup>n</sup>anà  
 ts'óanéma<sup>n</sup>  
 p'ap'órna<sup>n</sup>  
 t'alóanà  
 tsienéma<sup>n</sup>  
 p'óina  
 Lamuna<sup>n</sup>  
 nwiána  
 nwiána  
 Lap'aená  
 k'óanéma<sup>n</sup>  
 xanéma  
 manéma<sup>n</sup>  
 ma<sup>n</sup>xu<sup>n</sup>  
 ma<sup>n</sup>tsélenà  
 tuwata  
 xu<sup>n</sup>  
 pazná  
 ienénéma<sup>n</sup>  
 ie<sup>n</sup>xu<sup>n</sup>  
 u<sup>n</sup>u<sup>n</sup>  
 piána  
 o<sup>n</sup>néma<sup>n</sup>  
 kwáaga<sup>n</sup>

i<sup>n</sup>mp'aiuey  
 i<sup>n</sup>ntutey  
 i<sup>n</sup>mp'atuey  
 t'áide  
 p'i  
 p'<sup>n</sup>a  
 tc'úa  
 p'ap'óa  
 t'alúa  
 'ci  
 p'óey  
 Lamu  
 y<sup>n</sup>  
 w<sup>n</sup>  
 at<sup>n</sup>a  
 k'óa  
 k'<sup>n</sup>a  
 man  
 ma<sup>n</sup>k<sup>h</sup>u  
 ma<sup>n</sup>ciide  
 tuwa  
 pa  
 en  
 e<sup>n</sup>k<sup>h</sup>u  
 u<sup>n</sup>  
 pié  
 u<sup>n</sup>a  
 nathey

i<sup>n</sup>m'paue  
 i<sup>n</sup>ntutue  
 i<sup>n</sup>mp'atue  
 t'áinin  
 p'i  
 p'<sup>n</sup>a  
 tc'úa  
 p'ap'óa  
 t'alúa  
 'cie  
 p'óai  
 Lak'ai  
 nyé  
 mwyé  
 Lap'a  
 k'óa  
 k'<sup>n</sup>a  
 man  
 ma<sup>n</sup>k<sup>h</sup>u  
 ma<sup>n</sup>k<sup>h</sup>u<sup>n</sup>  
 kwerpo  
 pa  
 en  
 e<sup>n</sup>k<sup>h</sup>u  
 u<sup>n</sup>  
 pié  
 u<sup>n</sup>a  
 nató

English	Piro (Bartlett) ('Piro')	Isleta del Sur ('Tiwa')	Isleta ('Tiwa')	Taos ('Tiwa')	Jemez ('Jemez')	San Ildefonso ('Tewa')
39. Chief, governor	tal-k'hem-tsa-é	tabuizé	tabuizé	taboná	fwi	tuyo
40. Warrior	ah-te-hém	niaweLaizé		xotselená	hóvéla	há'ise <sup>n</sup>
41. Friend	pi-ye-é		puizé	ma <sup>t</sup> āmená	k'ia'bá	k'éma
42. House, home	hron-na-é	nat'hó	nat'hú	puená	tóha'a	tehwa
43. Kettle	si-la-yem		bužú	Lalmuluzná	gizéda	pwela
44. Bow	hui-lé	hwizé	hwizé	hwilená	o <sup>h</sup>	a <sup>h</sup>
45. Arrow	sa-wém	Loa	Loa	Loanéma <sup>n</sup>	tyóc	su
46. Axe	ha-tsa-é	'cihoa	'cihoa	kwázná	hež	k'ũ:wi
47. Knife	tse-é	'cie	'cie	tsiazná	gi <sup>u</sup> tyi	tsiyo
48. Canoe, boat	kia-noa-hem	kanoa	Lazé	Latduuná	i <sup>n</sup> nic	kop <sup>h</sup> e·
49. Shoes	kiu-pi-é	kóap	kúap	kóapáná	pi <sup>a</sup>	o <sup>n</sup> to
50. Pipe	pi <sup>a</sup> -hem	pi <sup>a</sup>	pi <sup>a</sup>	hwilená	tyo <sup>h</sup> ye	pi <sup>a</sup>
51. Tobacco	sa-yé	lè	lè	Lāzná	wápalá	sá
52. Sky, heaven	ya-pol-ya-wé yapolhua (O) y apol y ahuley (O)	p'apunyi	p'apunyi	p'apóná	hóta	ma <sup>h</sup> kówa
53. Sun	pu-é	t <sup>h</sup> ũ <sup>u</sup> z'izé	t <sup>h</sup> ũ <sup>u</sup> z'izé	t <sup>h</sup> ũlená	pe	t <sup>h</sup> an <sup>n</sup>
54. Moon	a-é	p'áide	p'áide	p'ázná	petyása	t <sup>h</sup> an <sup>n</sup> se <sup>n</sup> undo
55. Star	a-hio-sa-é	p'ak <sup>h</sup> óLaidé	p'ak <sup>h</sup> óLaidé	p'axóLazná	p'á	p'á·
56. Day	hrom-é	t <sup>h</sup> óide	t <sup>h</sup> óide	t <sup>h</sup> óüná	wu <sup>n</sup> hu <sup>n</sup>	a:royo
57. Night	no-é	nui <sup>u</sup> de	nui <sup>u</sup> de	nuzná	cú	t <sup>h</sup> adi
58. Light	na-moe-é	p <sup>h</sup> áide	napuya <sup>n</sup>	p <sup>h</sup> azná <sup>h</sup>	ndahua <sup>n</sup>	k <sup>h</sup> u <sup>n</sup> 'didi
59. Darkness	na-mo-hión-é		nanómi	owapiyáyá	i <sup>n</sup> nobo	na <sup>h</sup> enán <sup>n</sup>
					kwile	nak <sup>h</sup> u <sup>n</sup> 'há <sup>n</sup>

60. Morning	wa-i-vo-na-é	t <sup>h</sup> ômdaa	t <sup>h</sup> ômda	t <sup>h</sup> ômhalmu <sup>a</sup>	cũba ôl <sup>h</sup>	hedendi t <sup>h</sup> ei <i>i</i> ta <i>a</i> <sup>a</sup> <i>i</i> payo <i>e</i> <sup>a</sup> <i>i</i> p <sup>h</sup> oye <i>d</i> <sup>a</sup> <i>i</i>
61. Evening	que-na-é	tawekimhi	kimien	t <sup>h</sup> ôLonéma <sup>a</sup>	hu <sup>a</sup> na <sup>a</sup> k'izu	
62. Spring	ha-le-pu-na-é	tanwin	tanwin	tanwinenà	to <sup>a</sup> da <i>k</i> 'izu	
63. Summer	ha-leep-é	tanwin	tanwin	piłenà	pec	
64. Autumn	tu-la-é	tuwin	tuwin	payuznà	pà <i>z</i> hãtyik'izu	
65. Winter	tu-la-hel-ki-é	tuwin	tuwin	tuwinenà	tô <i>z</i>	tenud <i>i</i>
66. Wind	hua-é	waide	waide	wânéma <sup>a</sup>	kw <sup>h</sup> nic	wà
67. Thunder	kuen-sil-u-é	kwanide	kwanide	Latsienà	giwenu <sup>a</sup> tuk <sup>a</sup> i <sup>a</sup>	kwô <sup>a</sup> to <sup>a</sup>
68. Lightning	kien-lo-é	upidi <i>de</i>	upidi <i>de</i>	upelenà	lotyasa	tsigowãnu
69. Rain	na-a-waan	p'áide	Ludi <i>de</i>	Lulenà kwanenà	lotyec su <sup>a</sup> u <sup>a</sup> c	kwô <sup>a</sup>
70. Snow	pan-waan	p'anide	p'anide	p'anenà		p <sup>h</sup> o <sup>a</sup> <sup>a</sup> <i>n</i>
71. Hail	an-y'le-sol-é	ekuide	ekuide	ièko <i>nà</i>	zôbôda	sak'ambê
72. Fire	fa-yé	p'áide	p'áide	p'aa <i>nà</i>	fwaya	p <sup>h</sup> a:
73. Water	a-é	p'a	p'áide	p'aa <i>nà</i>	p'a	p'ô:
74. Ice	a-tsé-é	p'acie	p'acie	p'atsienà	wâsa	oyi
75. Earth, land	na-f'ol-é	nam	namide	namenà	'u <sup>a</sup> na <sup>a</sup> peta hu <sup>a</sup> u <sup>a</sup>	na <sup>a</sup> <i>n</i>
76. Sea	nafoleguey (O)	mar		p'axwianà		p'ô:kwi <sup>a</sup>
77. River	a-sa-é	p'elai <i>de</i>	p'ela	p'âlaanà	p'akwâ	p'ô:sog <i>z</i>
78. Lake	a-tsi-é		p'ahwie	p'axoneba	alaguna	p'ô:kw <sup>a</sup>
79. Valley	ki-a-yo-ná-é			xôalunà	p'awawâ	a <sup>h</sup> ko <sup>a</sup> <i>n</i>
80. Hill, mountain	he-hem	p'ien	p'ien	p'ïanenà	p'e	p'ï <i>n</i>
81. Island	na-isa-é			p'ap'ïanâp'ïanenéma <sup>a</sup>		p'ô:ya <i>d</i> <sup>a</sup> <i>i</i>
82. Stone	ia-wé	k'hiaw	k'hiuw	hiuwzna	k'ia'a	k'û <i>a</i>
83. Salt	so-án-é	p'ani	p'ali	p'alienà	k'io <sup>a</sup> wec	a <sup>a</sup> nyâ

English	Piro (Bartlett) ("Piro")	Isleta del Sur ("Tiwa")	Isleta ("Tiwa")	Taos ("Tiwa")	Jemez ("Jemez")	San Ildefonso ("Tewa")
84. Iron	po-ya-o-ná-é		kwák <sup>h</sup> ua	kwānā	gi <sup>h</sup> w	kwák <sup>h</sup> ū <sup>a</sup>
85. Tree	i-sa-ké				tyic	so <sup>h</sup> n
86. Wood	sa-hé	La	La	Laanā	fwo	kā
87. Leaf	a-o-lé	ù	nau	ūlənā	tyapac	k <sup>h</sup> owa
88. Bark	hia-yem	k <sup>h</sup> ai	k <sup>h</sup> ui	tiinēma <sup>n</sup>	t <sup>h</sup> āta <sup>n</sup>	
89. Grass	son-é	Li	Li	hai <sup>n</sup> ā	tyu <sup>n</sup> L	ta
90. Pine	huan-ém	wé	wi	Li <sup>n</sup> ā	kwān <sup>h</sup> c	nwā <sup>n</sup> n
91. Flesh, meat	ta-we	tuwa	tuwa	wācānā	gi <sup>h</sup> zon <sup>h</sup> a	pi <sup>h</sup> i
92. Dog	tsu-é	kwānāide	kwānāide	tuwa <sup>n</sup> ā	kyān <sup>h</sup> a	tse <sup>h</sup>
93. Buffalo	yo-tson-lé	sizolāide	sizolāide	tsulanā	tostya	koō <sup>n</sup>
94. Bear	kio-é	kōāide	kūāide	kanenā	hwāla	ke
95. Wolf	kia-lé	kā <sup>h</sup> ide	kā <sup>h</sup> ide	kōānā	ā <sup>h</sup> nyu <sup>n</sup> a	k <sup>h</sup> ū <sup>n</sup> yo
96. Deer	pi-ye	pi <sup>h</sup> ide	pi <sup>h</sup> ide	kalenā	pā <sup>n</sup>	pā
97. Elk	a-hoom-é			pācānā	ālō	tā
98. Beaver	a-ya-é		p <sup>h</sup> a <sup>h</sup> ade	tōinēma <sup>n</sup>	wāzi <sup>n</sup>	oyo
99. Tortoise	a-tzal-i-é		p <sup>h</sup> atsalucnā	p <sup>h</sup> aya <sup>n</sup> ā	apula	oku
100. Fly	a-fu-ya-é	p <sup>h</sup> unyūide	p <sup>h</sup> unyūide	p <sup>h</sup> unyucnā	f <sup>h</sup> wiya	p <sup>h</sup> unyu
101. Mosquito	quen-lo-a-tu-ya-é	tanki <sup>h</sup> an	tanki <sup>h</sup> ade	xwitolaanā	tyaha <sup>h</sup> wi <sup>h</sup> ya	cugo
102. Snake	pe-tsun-to-yan-é			pātsuznā	haya	pānyu
103. Bird	tsi-ki-é			pātsu <sup>h</sup> unā	seyiw	tside
104. Egg	a-we-yé	p <sup>h</sup> ahwe	p <sup>h</sup> ahwe	tsiuyunā	wā	wa
105. Feathers	yo-né	k <sup>h</sup> ea	k <sup>h</sup> ea	p <sup>h</sup> ahwācānā	k <sup>h</sup> iāt <sup>h</sup> ac	sip <sup>h</sup> ik <sup>h</sup> u <sup>n</sup> a
106. Wings	yo-na-hé	k <sup>h</sup> eawa	k <sup>h</sup> eawa	k <sup>h</sup> eawācānā	k <sup>h</sup> iā <sup>h</sup> ac	k <sup>h</sup> u <sup>n</sup> k <sup>h</sup> u <sup>n</sup> a
107. Duck	a-pēm <sup>h</sup> é	p <sup>h</sup> api <sup>h</sup> ide	p <sup>h</sup> api <sup>h</sup> ide	p <sup>h</sup> apiānā	wāci	obi <sup>h</sup> n
108. Pigeon	pa-lo-ma-é	palomāide	palomāide	palomanā	paloma	paloma
109. Fish	pu é	kaipāide	kaipāide	p <sup>h</sup> iāngai <sup>h</sup> pa <sup>h</sup> na	gi <sup>h</sup> na <sup>h</sup> mu <sup>n</sup> a	k <sup>h</sup> o <sup>h</sup> nwi
		pūide	pūide	p <sup>h</sup> iūnā	po	pa





English	Piro (Bartlett) ("Piro")	Isla del Sur ("Tiwa")	Isla ("Tiwa")	Taos ("Tiwa")	Jemez ("Jemez")	San Ildefonso ("Tewa")
138. They	wa-quay		yude	yunema <sup>n</sup>	nu <sup>n</sup> 'ac	nāli
139. This	ia-hēm		yede	yenema <sup>n</sup>	'u <sup>n</sup> 'ac	hāli
140. That (less remote)			hwade	wanema <sup>n</sup>	'i <sup>n</sup> 'ac	oii
That (more remote)				tsu	cyu	t'āki
141. All	ho-le-mé	'cimba	'cimba	ya	ila	m̄bayeki
142. Many, much	ma-o-wé	hiyakem	huyoat	p'u <sup>n</sup>	se	toā <sup>n</sup>
143. Who	ta-ou	payu <sup>n</sup>	paiyu <sup>n</sup>	hei <sup>n</sup> tena	seu <sup>n</sup> mu <sup>n</sup>	hi <sup>n</sup> zi
144. Near	he-o-pé			yanthō	kwālacū	nā <sup>n</sup> 'ā
145. Today	hio-sé		yanthō	yanthō		
yo se (O)						
146. Yesterday	tse-mé			huaxuā	'u <sup>n</sup> 'ā	tsa <sup>n</sup> 'ndi
147. Tomorrow	hwe-i-dé			haloma	sedali <sup>n</sup>	t'a <sup>n</sup> 'ndi
148. Yes (men say)	hoi-y'é		aa	ha <sup>n</sup>	o <sup>n</sup> 'e	hoi
Yes (women say)					hani	hā <sup>n</sup>
			aa	ha <sup>n</sup>	hani	
					hā <sup>n</sup>	
149. No	hen-kio-yé		indaa	hā <sup>n</sup> xuena	'i <sup>n</sup> yo	yo
150. One	eu-i-yu	m̄wim	wim	wema	ā	wi
151. Two	wi-yú	wisi	wisi	wiba	p'u <sup>n</sup>	wē <sup>n</sup> pi
152. Three	mōn-tu	patcua	patco	wina	wic	wlye
153. Four	we-no	wena	wien	payua	tāx	pōye
154. Five	an-tao	p'antua	p'anto	wiānu	wil	yonu
155. Six	ma-seu	ma <sup>n</sup> li	ma <sup>n</sup> li	p'anyua	p'ia <sup>n</sup> 'o	p'ānu
156. Seven	tsu-wuh	'cu	'cuu	ma <sup>n</sup> li	mi <sup>n</sup> tyi	si <sup>n</sup>
157. Eight	hui-li-yá	hwid'i	hwid'i	tsuu	sō <sup>n</sup>	tse <sup>n</sup>
158. Nine	hwa-weh	hw <sup>n</sup> è	hw <sup>n</sup> è	hwili	hō <sup>n</sup>	k'ā <sup>n</sup> 'e
			hū <sup>n</sup> 'ā	hw <sup>n</sup> ā	hu <sup>n</sup>	hwā <sup>n</sup> nu

	tên-yo	tî <sup>n</sup> dzehem	têm	tân	tân <sup>g</sup>
159. Ten			tânk'ôtima		
160. Eleven	tên-u-i	tî <sup>n</sup> mwim	tânwema	tân'p'u <sup>n</sup>	tân <sup>g</sup> dzîwi
161. Twelve	tên-wi-yu	tî <sup>n</sup> wisi	tânwîlîna	tânwic	tân <sup>g</sup> dzîwîye
162. Twenty	tên-te-yo	witî <sup>n</sup>	witî <sup>n</sup>	wiyutî <sup>n</sup>	wetân <sup>g</sup>
163. Forty	we-na-te-leo	weentî <sup>n</sup>	wîântî <sup>n</sup>	wî <sup>n</sup> kwâtî <sup>n</sup>	yônânî <sup>n</sup>
164. One hundred	tên-na-te-leo	tî <sup>n</sup> witî <sup>n</sup>	wemsîena	tân <sup>g</sup> kwâtî <sup>n</sup>	tân <sup>g</sup> î <sup>n</sup> î <sup>n</sup>
165. Four hundred	wên-tên-na-ta-leo	wientî <sup>n</sup> witî <sup>n</sup>	wîânsîena	wî <sup>n</sup> kwâtî <sup>n</sup> na <sup>n</sup> wî <sup>n</sup> kwâtî <sup>n</sup>	yônânî <sup>n</sup> î <sup>n</sup> î <sup>n</sup>
166. One thousand	tên-yo-tên-na-ta-leo	mil	(tân <sup>g</sup> tela)	mil	wî mil
167. To eat	-tu-	-k'u-	-k'a-	-kwôyî-	-k'o-
168. To drink	-su <sup>n</sup> -	-su <sup>n</sup> -	-su <sup>n</sup> -	-cyu <sup>n</sup> -	-su <sup>n</sup> mwâ-
169. To run	-tôdwe-	-tôdwe-	-we-	-selamî <sup>n</sup> -	-â-
170. To dance			-t'a-	-tcîî <sup>n</sup> -	-ya-
171. To sing	ha-ya-ta-hôî	-ca-	-yat'a-	-dzâ-	-k'a'wa <sup>n</sup> -
172. To sleep	ha-ya-tu-môo	-ya-	-yapiuxa-	-dô-	-yok <sup>h</sup> o-
173. To speak	ha-tze-sa-yoi	-tu <sup>n</sup> -	-tu <sup>n</sup> -	-tse-	-tu <sup>n</sup> -
174. To see	hin-mo-oi	-mu <sup>n</sup> -	-mu <sup>n</sup> -	-mu <sup>n</sup> -	-muu-
175. To love	ta-pe-tao	-pe-?	-maxân-	-wa-	-ndaa-
176. To kill	kie-hu-nao	-hu-	-hu-	-ô-	-he
177. To sit	hel-en-é	-La-	-La-	-tâse-	-â <sup>n</sup> -
178. To stand	hel-wi-én	-wi-	-wi-	-kwi-	-wi-
179. To go	hel-o-fo-yé	-mî <sup>n</sup> -	-mî <sup>n</sup> -	-mî <sup>n</sup> -	-mâ <sup>n</sup> -
180. To come	na-hele-yao	-î <sup>n</sup> -	-î <sup>n</sup> -	-î <sup>n</sup> -	-ââ-

The stems of the Piro words are discussed first, in the order in which they occur in the vocabulary. Next the affixes are discussed in alphabetic order. The hyphenization of the Piro has been retained. Hyphens used in writing the other languages indicate that only a part of the word is quoted.

#### EXPLANATION OF PIRO STEMS

1. *o-ye*, man. That this word means old man is evident from P. 124 *o-i-sa-é*, old. Unexplained; but cf. J. 2, I. S. 6, and I. S. 7.

2. *su-n'e*, woman. *su-* = I. S., I. and T. 2 *Liu-*. With the whole word cf. T. *Liuund*, old woman, diminutive of T. *Liuenà*, woman.

3. *at-sam-é*, boy. Cf. P. 123 *a-tzem-é*, young; P. 122 *ma-tse-é*, strong. *t-sam-* = T. 123 *-ts'em-*, young.

4. *yool-é*, girl. *yoo* = I. S., I. and T. diminutive element *uu*, *u*. With the whole word cf. I. S. 4 *uuide*, little girl; I. 5 *uude*, infant.

5. *yu-wa-né*, infant. *yu-* = P. 4 *yoo* = I. S., I. and T. diminutive element *uu*, *u*. *yu-wa-* = I. S. 10 *-uwa-*.

6. *el-em-ta-ta-é*, my father. Cf. O. *quitatac* (for *quitatae*?), our father. *-ta-ta-* = I. 6 *-tata-*; J. 6 *tata*. Cf. also Spanish *tata*, father. *ta* is clearly Tanoan. Similar reduplication occurs in P. 12, 13. With *-em-ta-ta-é* cf. I. 6 *i<sup>n</sup>ntataey*, my father.

7. *et-em-kia-é* (for *el-em-kia-é*?), my mother. *-kia-* = I. S., I. and T. 7 *ka*. With *-em-kia-é* cf. I. 7 *i<sup>n</sup>nkey* (for *i<sup>n</sup>nkaey*?), my mother.

8. *el-a-man-tsal-a-é*, my husband. *-tsal-a-* = I. S. 8 *-sôa-*. Tongue raising gives ô an l-like quality. With *-a-m-* — *-tsal-a-é* cf. I. S. 8 *i<sup>n</sup>nsôae*.

9. *el-a-m'sun-é*, my wife. *'sun-é* = P. 2 *su-n'e*.

10. *el-a-m'eu-i-é*, my son. *eu-* = P. 4 *yoo* = P. 5 *yu-* = I. S., I., T. diminutive element *uu*, *u*. *eu-i-* = P. 5 *yu-wa-* = I. S. 10 *-uwa-*. With *-a-m'eu-i-é* cf. I. S. 10 *i<sup>n</sup>nuwae*, my son.

11. *el-a-m'eu-i-sun-é*, my daughter. *el-a-m'eu-i-* = P. 10 *el-a-m'eu-i-sun-é* = P. 2 *su-n'e* = P. 9 *'sun-é*.

12. *el-a-m'pu-pu-é*, my brother. *'pu-pu-* = I. S. 12 *-papau-*. With *a-m'pu-pu-é* cf. I. S. 12 *i<sup>n</sup>npapaue*.

13. *el-a-m'qu-qu-é*, my sister. *qu-qu-* = I. S. *-tutuu-*. With *-a-m'qu-qu-é* cf. I. S. *i<sup>n</sup>ntutuué*. It is most probable that Bartlett mistook t for q. Dr Fewkes writes "naku," house, for my I. S. 42 *na<sup>h</sup>ô*, house.<sup>1</sup> Cf. however J. 13.

<sup>1</sup>Fewkes, The Pueblo Settlements near El Paso, Texas, *American Anthropologist*, Jan., 1902, p. 67.

14. *a-tsi-hem*, Indian, people. *-tsi-* = I. *Ley*, Indian, people.

15. *pi-nêm*, head. *pi-* = I. S. and I. 15 *p'i* = T. 15 *p'i-*. With the whole word cf. T. 15 *p'inêma<sup>n</sup>*, head. P. 15 *pi-nêm* : T. 15 *p'inêma<sup>n</sup>* :: I. S. 150 *mawim* : T. 150 *wema*.

16. *sa-na-ê* (for *fa-na-ê?*), hair. Same as P. 22 *sa-na-ê*, mouth! *sa-* = P. 25 *-fa-* = I. S., I. 16 *p<sup>h</sup>a* = T. 16 *p<sup>h</sup>a-*. With *sa-na-* cf. T. 16 *p<sup>h</sup>aena*, hair.

17. *tso-hêm*, face. *tso-* = I. S. 17 *tc'ô-* = I. 17 *tc'û* = T. 17 *ts'ô-*.

18. *tsi-kia-nêm*, forehead. *tsi-* = P. 20 *tsi-* = I. S. 20 *'ci-* = I. 20 *'ci* = T. 20 *tsi-*. *-kia-* = T. *-kwa-* in T. *tsikwanêma<sup>n</sup>*, eyebrows. With the whole word cf. T. *tsikwanêma<sup>n</sup>*, eyebrows, forehead.

19. *tah-so-hêm*, ear. *tah-so-* = I. S. 19 *t' aLô-* = I. 19 *t' aLû-* = T. 19 *t' aLô-*.

20. *tsi-hio-nê-que*, eye. *tsi-* = P. 18 *tsi-* = I. S. 20 *'ci-* = I. 20 *'ci* = T. 20 *tsi-*. The rest of the word is not explained. With *-hio* cf. 88; those words mean skin as well as bark. I. *'cik<sup>h</sup>ui* means eyelid. With *-que* one might compare J. *-kwâ* in J. *sekwâ* eyes; J. *se* means one eye.

21. *fu-é*, nose. *fu-é* = I. S. 21 *p<sup>h</sup>ôi* = I. 21 *p<sup>h</sup>ôey* = T. 21 *p<sup>h</sup>ôi-*.

22. *sa-na-é*, mouth. *sa-* P. 25 *tsa-* = I. S., I., T. 22 *La-*.

23. *mi-n'ê*, tongue. *mi-n'e* = I. S. 23 *nyè* = I. 23 *y<sup>n</sup>ê*. *mi-n'* is used here evidently to express nasalized *y*.

24. *we-yé*, teeth. *we-yé* = I. S. 24 *nwyè* = I. 24 *w<sup>n</sup>è* = T. 24 *nwiä-*.

25. *tsa-fa-hê*, beard. *tsa-* = P. 22 *sa-* = I. S., I., T. 22 *La-*, mouth. *fa-* = P. 16 *sa-* = I. S., I. 16 *p<sup>h</sup>a* = T. 16 *p<sup>h</sup>a-*, hair. The word means 'mouth-hair,' hair about the mouth. With *tsa-fa-* cf. I. S. 25 *Lap<sup>h</sup>a* and T. 25 *Lap<sup>h</sup>a-*.

26. *youl-wa-hem*, neck. *youl-wa-* = I. S., I. 26 *k'ôa* = T. 26 *k'ôa-*. For a similar spelling used by Bartlett cf. P. 8.

27. *hia-hem-*, arm. *hia-* = I. S., I. 27 *k<sup>h</sup>a* = T. 27 *xa-*.

28. *ma-nem*, hand. *ma-n* = I. S., I. 28 *man* = T. 28 *man-*. cf. 29 and 30.

29. *man-hio-nê*, fingers. *man-* = P. 30 *man-* = I. S., I., T. 29, 30 *ma<sup>n</sup>-*. Cf. 28. *-hio-* = P. 34 *-hio-* = I. S. 29, 30, 34, I. 29, 34 *-k<sup>h</sup>u-* = T. 29, 34 *-xu-*. *k<sup>h</sup>u* is said to mean end in the Isleta language. With the whole word cf. T. 29 *ma<sup>n</sup>xuenâ*, fingers.

30. *man-sa-si-hê*, nails. *man-* = P. 29 *man-* = I. S., I., T. 29, 30 *ma<sup>n</sup>-*. Cf. 28. *-sa-* = *-k<sup>h</sup>u-* in I. S. 30 *ma<sup>n</sup>k<sup>h</sup>u<sup>c</sup>in*, nails; or = *-sa-* in P. 32 *pe-sa-hem*, leg. *-k<sup>h</sup>u-* appears as *-hio-* in P. 29, 34. *-si-* = I. S., I. 30 *-ci-* = T. 30 *-tsè-*. *man-sa-si-* is possibly comparable to I. S. 30 *ma<sup>n</sup>k<sup>h</sup>u<sup>c</sup>i-*.

31. *el-en-cuerpo-é*, body (my body?). -*cuerpo*- = Spanish *cuerpo*, body.

32. *pe-sa-hém*, leg. *pe*- = I. S., I. 32 *pa* = T. 32 *pa*-. -*sa*- = P. 77 -*sa*- = I. S., I., T. 77 -*La*, large. With *pe-sa*- cf. I. *paLa*, T. *paLa*-, "big fat leg."

33. *a-nēm*, foot. *a-n* = I. S., I. 33 *en* = T. 33 *ien*-. Cf. also 34.

34. *an-hio-né*, toes. *an*- = I. S., I. *e<sup>n</sup>*- = T. *ie<sup>n</sup>*-. -*hio*- = P. 29 -*hio*- = I. S. 29, 30, 34, I. 29, 34 -*k<sup>h</sup>u*- = T. 29, 34 -*xu*-. With the whole word cf. T. 34 *ie<sup>n</sup>xuēnā*, toes.

35. *ou-an-ém*, bone. *ou-an* = I. S., I. 35 *u<sup>n</sup>* = T. *u<sup>n</sup>u<sup>n</sup>*-. With the whole word cf. T. *u<sup>n</sup>u<sup>n</sup>nēma<sup>n</sup>*, bones.

36. *pe-n'é*, heart. *pe*- = I. S., I. 36 *piè* = T. 36 *piä*-. With the whole word cf. T. 36 *piäenā*, heart.

37. *u-hém*, blood. *u*- = I. S., I. 37 *u<sup>n</sup>* = T. 37 *o<sup>n</sup>*-.

38. *tai-hone-a-é*, village. *tai*- = I. S. 38 -*tōi* = I. 38 -*tōey*. The rest of the word is unexplained.

39. *tai-k'hem-tsa-é*, chief. Unexplained.

40. *ah-te-hem*, warrior. Unexplained.

41. *pi-ye-é*, friend. *pi-y* = -*puy*- in I. S. *i<sup>n</sup>mpuywae*, my friend = I. 41 *pui*- = T. 41 *pui*-.

42. *hron-na-é*, house. *hro* = I. S. 42 -*t<sup>h</sup>ō* = I. 42 -*t<sup>h</sup>ū* = T. 42 *t<sup>h</sup>ū*-. With *hron-na*- cf. T. *t<sup>h</sup>ūnā*, house.

43. *si-la-yem*, kettle. *si-la*- = P. 132 -*si-le* = I. 132 -*Lide*- = T. 132 -*Lila*-, hot.

44. *hui-lé*, bow. *hui-lé* = I. S., I. 44 *hwide* = T. 44 *hwile*-.

45. *sa-wēm*, arrow; *sa-w* = I. S., I., T. 45 *Lo*-.

46. *ha-tsa-é*, axe. *ha-tsa*- = Spanish *hacha*, axe.

47. *tse-é*, knife. *tse*- = I. S., I. 47 '*cie*' = T. 47 *tsia*-.

48. *kia-noa-hem*, canoe, boat. *kia-noa* = Spanish *canoa*, canoe, boat.

49. *kiu-pi-é*, shoes. *kiu-pi* = T. 49 *kōapā*-. Cf. I. S. 49 *kōap* and I. 49 *kūap*-.

50. *pipa-hem*, pipe. *pipa*- = Spanish *pipa*, pipe.

51. *sa-yé*, tobacco. *sa*- = I. S., I 51 *lè* = T. 51 *lā*-. The *y* probably merely indicates the glide between *a* and *e*. It suggests that the tongue was raised while pronouncing *a*, thus approaching *ā* or *è*.

52. *ya-pol-ya-wé*, sky, heaven. Both forms from O. show *yapol*-. With *pol*- or *pol-ya*- cf. T. 52 *pō*-. For this spelling cf. P. 8 and 26.

53. *pu-é*, sun. Unexplained; but cf. J. *pe*, sun.

54. *a-é*, moon. *a*- = I. S., I., T. 54 *p'ā*-.

55. *a-hio-sa-é*, star. *a-hio-sa*- = I. S. 55 *p'ak<sup>h</sup>ōLa* = I. 55 *ak<sup>h</sup>ūLa*- = T. 55 *p'axōLa*-.

56. *hrom-é*, day. *hro* = I. S. 56 *tʰô* = I. 56 *tʰâ* = T. 56 *tʰô*.

57. *no-é*, night. *no* = I. S., I., T. 57 *nu*.

58. *na-moe-é*, light. *-moe* = I. *-puya*<sup>n</sup> in I. *napuya*<sup>n</sup>, light. For Bartlett's *m* for I. S., I., T. *p* see P. 152. But cf. also S. I. Tewa *múwä*, "the light accompanying lightning." Also cf. P. 58 *na-mo-hion-é*, darkness, in which *-hion-* seems to be the element which signifies darkness and *-mo-* merely a formative element.

59. *na-mo-hión-é*, darkness. *-hion-* is apparently the same as J. 59 *-hu*<sup>n</sup> and S. I. 59 *-kʰu*<sup>n</sup>. *-mo-* seems to be used in T. verbs as a temporal infix. With the structure of this word cf. P. 38.

60. *wa-i-vo-na-é*, morning *wa-i* = P. 147 *hwe-i*. Unexplained.

61. *que-na-é*, evening. Unexplained. *que* = I. S. 61 *-ki* = I. 61 *ki*?

62. *ha-le-pu-na-é*, spring. Unexplained. *ha-le-p* = P. 63 *ha-leep*. With exception of *u-na* this word is the same as P. 63, of which it is probably a diminutive.

63. *ha-leep-é*, summer. Unexplained. *ha-leep* = P. 62 *ha-le-p*. With omission of *u-na* the same as P. 62.

64. *tu-la-é*, autumn. *tu* = P. 65 *tu* = I. S., I. 64, 65 *tu* = T. 65 *tu*.

65. *tu-la-hel-ki-é*, winter. *tu* = P. 64 *tu* = I. S., I. 64, 65 *tu* = T. 65 *tu*. *-hel-ki*, unexplained.

66. *hua-é*, wind. *hua* = I. S., I. *wa* = T. *wâ*.

67. *kuen-sil-u-é*, thunder. *kuen* = I. S. and I. 67 *kwan* = T. 69 *kwan*, "a sudden rain." Cf. also P. 68 *kien-si* = T. 67 *-tsi*. T. 67 *La* = J. 68 *-tyà*, *-tye*. With omission of *-si* this word is probably the same as P. 68.

68. *kien-lo-é*, lightning. Probably the same as P. 67 with omission of *-si*.

69. *na-a-wâan*, rain (rain falls?). *-a* = P. 71 *a* = P. 73 *â* = P. 74, 77, 78 *a* = I. S. 69, 74, I. 73, 74, 78, T. 73, 74, 76, 77, 78, *p'â* = I. S. 73 *p'â*. *-wâan* = *-wân* in Gatschet's I. *pá 'lu 'laide wâna*, rain (*pâ*) fell (*wâna*) in heavy drops (*'lu 'laide*).<sup>1</sup>

70. *pan-wâan*, snow. *pan* = I. S., I., T. 70 *pʰa-wâan*. *-wâan* as in P. 69.

71. *an-y'le-sol-é*, hail. *a* = P. 69 *-a* = P. 73 *â* = P. 74, 77, 78 *a* = I. S. 69, 74, I. 73, 74, 78, T. 73, 74, 76, 77, 78 *p'â* = I. S. 73 *p'â*. The rest is unexplained.

72. *fa-yé*, fire. *fa* = I. S., I., T. 72 *pʰâ*.

<sup>1</sup>Gatschet, A Mythic Tale of the Isleta Indians, New Mexico, *Proceedings of the American Philosophical Society*, vol. XXIX, p. 211.

73. *â-é*, water *â-* = P. 69 *-a-* = P. 71 *a* = P. 74, 77, 78 *a-* = I. S. 69, 74, I. 73, 74, 78, T. 73, 74, 76, 77, 78 *p'â-* = I. S. 73 *p'â*. The circumflex suggests that Bartlett noticed some peculiar quality of the *â-*, perhaps the initial *p'*.

74. *a-tsè-é*, ice. *a-tsè-* = I. S., I. 74 *p'âcie* = T. *p'âtsie-*. *a-* is evidently the word for water, as in P. 69, 71, 73, 77, 78.

75. *na-f'ol-é*, earth, land. Cf. O. *nafoleguey*, on earth. *na-* = I. S. 75 *nam* = I., T. 75 *nam-*. The rest is unexplained.

76 — — —.

77. *a-sa-é*, river. *a-sa-* = I. S. 77 *p'eLa-* = I. 77 *p'eLa*, or = T. 77 *p'âLa-*. T. *p'âLa-* clearly means big water. Whether P. 77 *a-* is the same as T. *p'â-* or is rather to be compared to the obscure *p'e-* in the I. S. and I. words cannot be determined.

78. *a-tsi-é*, lake. *a-tsi-* = T. *p'âtsi-* in T. *p'âtsinà*, spring. *a-* = P, 69 *-a-* = P. 71 *a* = P. 73 *â-* = P. 74, 77 *a-* = I. S. 69, 74, I. 73, 74, 78, T. 73, 74, 76, 77, 78 *p'â* = I. S. 73 *p'â*.

79. *ki-a-yo-nâ-é*, valley. *ki-a-yo-* = T. 79 *xōa-*.

80. *he-hem*, hill, mountain. *he-* = I. *hwiè*, hill, mountain?

81. *na-isla-é* island. *-isla-* = Spanish *isla*, island.

82. *ia-wé*, stone. *ia-w* = P. 84 *-ya-o-* = I. S. 82 *k'iaw* = I. 82 *k'iuw* = T. 82 *hiuw-*. Cf. especially I. S. 82 *k'iaw*, stone.

83. *so-ân-é*, salt. *so-*, unexplained. *-ân-é* = I. S. 83 *p'ani*, salt. Cf. also I. 83 and T. 83.

84. *po-ya-o-nâ-é*, iron. *po-*, unexplained. *-ya-o-* = P. 82 *ia-w* = I. S. 82 *k'iaw* = I. 82 *k'iuw* = T. 82 *hiuw-*, stone.

85. *i-sa-ké*, tree. The Tanoan languages possess no generic name for tree. *i-*, unexplained. *-sa-* = P. 86 *sa-* = I. S., I. 86 *La* = T. 86 *La-*.

86. *sa-hé*, wood. *sa-* = P. 85 *-sa-* = I. S., I. 86 *La* = T. 86 *La-*.

87. *a-o-lé*, leaf. *a-o-* = I. S. 87 *û* = I. 87 *-u* = T. 87 *û-*.

88. *hia-yem*, bark. *hia-* I. S. 88 *k'ai*, skin, bark = T. 88 *xai-*, skin, bark. Cf. also I. 88 *k'ui*, skin, bark and P. 20 *-hio-*.

89. *son-é*, grass. *son-* is the phonetic equivalent of J. 89 *tyu*<sup>n</sup>, grass. J. 89 *tyu*<sup>n</sup> : P. 89 *son-* :: J. 59 *-hu*<sup>n</sup> : P. 59 *-hion-*.

90. *huan-ém*, pine. *hua* = I. S. 90 *wè* = I. 90 *wi* = T. 90 *wä-*. Cf. especially the I. S. and T. forms.

91. *ta-we*, meat. *ta-we* = I. S., I. 91 *tuwa* = T. 91 *tuwa-*.

92. *tsu-é*, dog. *tsu-* = T. 92 *tsu-*. Cf. also S. I. *tse'*, dog. The I. S., I and J. use an entirely different word.

93. *yo-tson-lé*, buffalo. Unexplained. No native word for buffalo could be obtained at I. S. or I.

94. *kio-é*, bear. *kio-* = I. S. 94 *kôa-* = I. 94 *kûa-* = T. 94 *kôa-*.  
 95. *kia-lé*, wolf. *kia-* = I. S., I., T. 95 *ka-*.  
 96. *pi-ye*, deer. *pi-* = I. S., I. 96 *pi-* = T. 96 *pä-*. Cf. especially the I. S. and I. forms.  
 97. *a-hoom-é*, elk. *a-hoom-* = T. *p'a hum-* in T. *p'a humenâ*, white-tailed deer. Bartlett's informants doubtlessly misunderstood him.  
 98. *a-ya-é*, beaver. *a-ya-* = I. 98 *p'a'ca-* = T. 98 *p'aya-*. Cf. especially T. *p'aya-*.  
 99. *a-tzal-i-é*, tortoise. *a-tzal-i-* = T. 99 *p'atsalu-*. The u of the Taos form is sometimes unlauted into an i-like sound by its setting.  
 100. *a-fu-ya-é*, fly. *a-fu-ya-é* = P. 101 *-a-tu-ya-é*. For *a-* see list of formative elements. *-fu-ya-* = I. S., I., T. 100 *p'unyu-*.  
 101. *quen-lo-a-tu-ya-é*, mosquito. Bartlett suggests that the word means "the insect that bites." *quen-lo-* somewhat resembles T. 101 *xwitola-*. *-a-tu-ya-é* = P. 100 *a-fu-ya-é*, fly, "insect."  
 102. *pe-tsun-to-yan-é*, snake. *pe-tsu-* = T. 102 *pätsu-*, snake. The I. S. and I. forms, when obtained, will probably begin with *pe* or *pi*. The rest of the word is unexplained.  
 103. *tsi-ki-é*, bird. *tsi-* = T. 103 *tsi-*, bird. The T. form is apparently a diminutive.  
 104. *a-we-yé*, egg. *a-we-* = I. S., I. 104 *p'ahwe* = T. 104 *p'ahwä-*.  
 105. *yo-né*, feathers. *yo-* = P. 106 *yo-* = I. S. 105 *k'ea* = I. S. 106, I. 106, T. 105, 106 *k'ea-*.  
 106. *yo-na-hé*, wings. *yo-* = P. 105 *yo-* = I. S. 105 *k'ea* = I. S. 106, I. 106, T. 105, 106 *k'ea-*.  
 107. *a-pêm'e*, duck. *a-pê-* = I. S., I., T. 107 *p'api-*.  
 108. *pa-lo-ma-é*, pigeon. *pa-lo-ma-* = Spanish *paloma*, pigeon. I. S., I. 108 *kaiपाide*, T. 108 *p'iängaipaaana*, mean wild pigeon.  
 109. *pu-é*, fish. *pu-* = I. S., I. 109 *pu-* = T. 109 *pö-*. Cf. especially the I. S. and I. forms.  
 110. ——— ——— ———.  
 111. ——— ——— ———.  
 112. ——— ——— ———.  
 113. *ma-kia-pe-tôw*, affection. *ma-kia-* = T. 113 *maxâ-*. *-pe-tôw* = P. 175 *-pe-tao*. *-pe-* may be compared with the doubtful I. 175 *-pe-*, to love.  
 114. *na-a-tzay-é*, white. *a-tzay-* = I. S. 114 *p'at<sup>h</sup>ô* = I. 114 *p'ât<sup>h</sup>* = T. 114 *p'at<sup>h</sup>ô*, white.  
 115. *na-a-se-en-é*, black. *-se-en-* = I. S., I., T. 115 *p<sup>h</sup>ün-*, black.  
 116. *na-u-é*, red. With *-u-* cf. J. 116 *u<sup>n</sup>-*, red, and S. I. 116 *â<sup>n</sup>-*, dark red. Cf. also P. 37 *u-*, blood.



117. *na-tzeu-é*, blue. *-tzeu-* = P. 119 *-tzeu-* = I. 119 *-t'cu-*, green. Cf. also T. 117, 119 *-tsa-*, blue, green. With omission of *-se-* the same as P. 119.

118. *na-sa-wa-é*, yellow. *-sa-wa-* = I. S., I. 118 *-t'c'u-* = T. 118 *-ts'u-*, yellow.

119. *na-tzeu-se-é*, green. *-tzeu-* = P. 117 *-tzeu-* = I. 119 *-t'cu-*. Cf. also T. 117, 119 *-tsa-*, blue. With *-se-* cf. S. I. 119 *-si-*. *-se-* inserted, otherwise the same as P. 117.

120. *ma-wé*, great. *ma-wé* = P. 127 *ma-wé*, handsome. *ma-* = P. 121, 122, 126, 127, 128, 131, 132, 142 *ma-*. See list of affixes. With *ma-* cf. S. I. *ma-*, great, superior.

121. *hia-wé*, small. *hia-* = I. S., T. 121 *-ya-*. Cf. also I. 121 *-yu-*.

122. *ma-tze-é*, strong. *-tse-* = P. 3 *t-sa* = P. 123 *-tze* = T. 123 *-ts'e-*, young.

123. *a-tzem-é*, young. *-tzem-* = P. 3 *t-sam-*, boy = T. 123 *-ts'em-*, young. Cf. also P. 122 *-tze-*, strong.

124. *o-i-sa-é*, old. Unexplained. *o-i-* = *o-y* in P. 1 *o-ye*, man.

125. *ma-na-su-o-é*, good. *-su-*, unexplained.

126. *ma-na-foi-ye*, bad. *ma-foi-ye* = P. 128 *ma-fo-yé*, ugly. Unexplained.

127. *ma-wé*, handsome. *ma-wé* = P. 120 *ma-wé*, great. Cf. S. I. *ma-*, great, superior.

128. *ma-fo-yé*, ugly. With exception of *-na-* the same as P. 126 *ma-na-foi-ye*, bad. Unexplained.

129. *wa-é*, alive. *wa-* = I. S., I., T. 129 *-wa-*.

130. *pi-wé*, dead. *pi-w* = I. S., I., T. 130 *-piu-*.

131. *ma-na-ya-é*, cold. *-ya-*, unexplained.

132. *ma-na-si-lé*, warm. *-si-lé* = P. 43 *si-la-* = I. 132 *-lide-* = T. 132 *-lila-*.

133. *na-o-é*, I. *na-* = I. S., I., T. 133 *na<sup>n</sup>*. In I. S., I. and T. some intransitive verbs denoting motion begin in the first person singular with *na<sup>n</sup>o*.

134. *e-ki-é*, thou. *e-* = I. S., I. 134 *i<sup>n</sup>* = T. 134 *ã<sup>n</sup>*.

135. *wa-é*, he. *wa-* = P. 138 *wa-* I. S., I. 135 *awa*, he, she, it = T. 135 *awe-*, that one. *na*, also meaning he, she or it, occurs 26 times in the Piro vocabulary. See list of affixes.

136. *na-saām*, we. *am*, unexplained.

137. *na-sa-i*, ye. *-i* = P. 134 *e-* = I. S., I. 134 *i<sup>n</sup>* = T. 134 *ã<sup>n</sup>*.

138. *wa-quay*, they. *wa-* = P. 135 *wa-* = I. S., I. 135 *awa* = T. 135 *awe-*.

139. *ia-hêm*, this. *ia-* = I., T. 140 *ye-*, that (less remote).

140. ———— ———— ————.
141. *ho-le-mé*, all. Unexplained.
142. *ma-o-wé*, many, much. -o-, unexplained.
143. *ta-ou*, who. *ta-ou* = I. S. 143 *payu*<sup>n</sup> = I. 143 *paiyu*<sup>n</sup>. Cf. T. 143 *p'u*<sup>n</sup>. Cf. also I. S. 143 *toā*<sup>n</sup>.
144. *hé-o-pé*, near. *hé-* = T. 144 *hé-*.
145. *hio-sé*, today. Cf. O. *yo se*, this day. *hio-se* = I. S. 145 *yanthô* = I. 145 *yanthû* = T. 145 *yanthôya*. With *hio-* and *yan-* cf. P. 139 *ia-* and I. T. 140 *ye-*, that (less remote).
146. *tse-mé*, yesterday. Unexplained. Cf. S. I. 146 *tsā<sup>n</sup> ndi*, yesterday.
147. *hwe-i-dé*, tomorrow. Unexplained. *hwe-i-* = P. 60 *wa-i-*.
148. *hoi-y'é*, yes. It is assumed that this is the men's word for yes, since Bartlett's informants were men. *hoi-y* appears to be identical with the S. I. men's word for yes, *hoi*. The I. S., I. and T. show no difference between the men's and women's language, and at S. I. there seems to be a tendency on the part of the men to substitute *hā<sup>n</sup>*, the women's word for yes, for *hoi*, the men's word.
149. *hen-kio-yé*, no. *hen-kio-* = T. 149 *hā<sup>n</sup>xu-*.
150. *eu-i-yu*, one. *eu-i-* = P. 160 *-u-i* = I. S. 150 *mwi-* = I. S. 160 *-mwi-* = I. 150 *wi-* = I. 160, 164, 165 *-wi-* = T. 150 *wi-* = T. 150, 164 *we-* = T. 160 *-we-*. For *-yu*, *-u* of this and following numerals see the list of affixes.
151. *wi-yú*, two. *wi-* = P. 161 *-wi-* = I. S., I., T. 151, 162 *wi-* = I. S., I., T. 161 *-wi-*. P. shows *-yu*; I. S. and I. show *-si*; T. shows *-inā*. Possibly more than one suffix can be used in each of these languages.
152. *môn-tu*, three. *môn-tu* = I. S. 152 *patcu-* = I. 152 *patco*. Cf. also T. 152 *payua* and with Bartlett's *-tu* cf. possibly J. 252 *tāx*.
153. *we-no*, four. *we-no* = P. 163 *we-na-* = I. S. 153 *wena* = T. 153 *wiānu*. *we-n* = P. 165 *wen-* = I. S. 163 *ween-* = I. 153 *wien* = I. 163, 165 *wien-* = T. 163, 165 *wiān-*.
154. *an-tao*, five. *an-tao* = I. S. 154 *p'antua*. *an-ta* = I. 154 *p'anto*. Cf. T. 154 *p'anyua*.
155. *ma-seu*, six. *ma-se* = I. S., I., T. 155 *ma<sup>n</sup>Li*.
156. *tsu-wuh*, seven. *tsu-wuh* = I. 156 *'cuu* = T. 156 *tsuu*. *tsu-* = I. S. 156 *'cu*.
157. *hui-li-yú*, eight. *hui-li-* = I. S., I. 157 *hwidi* = T. 157 *hwili*.
158. *hua-weh*, nine. *hua-weh* = I. S. 158 *hw<sup>n</sup>è* = I. 158 *hū<sup>n</sup>d'*. Cf. T. 158 *hwi<sup>n</sup>à*.
159. *tên-yo*, ten. *tên-yo* = P. 162 *-te-yo-* = P. 166 *tên-yo-*. *tên-* = P. 160, 161, 162 *tên-* = P. 165, 166 *-tên-* = I. S. 160, 161 *tī<sup>n</sup>-* = I. S.

162, 163 *-ti<sup>n</sup>* = I. 159, 160, 161, 164 *ti<sup>n</sup>* = I. 162, 163, 164, 165 *-ti<sup>n</sup>* = I. 165 *-ti<sup>n</sup>* = T. 159 *tè* = T. 159, 160, 161, 164, 166 *tä<sup>n</sup>* = T. 162, 163 *-tä<sup>n</sup>*. The suffix *-yo* appears on this word only in P. 159, 162, 166. For *-na-* of *tên-na-* see list of affixes.

160. *tên-u-i*, eleven. Cf. P. 159 and P. 150.

161. *tên-wi-yu*, twelve. Cf. P. 159 and P. 151.

162. *tên-te-yo*, twenty, literally "tenteen." Cf. P. 160 and P. 161. *-te-yo* probably for *tên-yo*. Cf. P. 159. The other languages all show a form which contains the numeral two.

163. *we-na-te-leo*, forty. With *we-na-* cf. P. 153. *-te-le* = P. 164 *-te-le* = P. 165, 166 *-ta-le* = T. 164 (166) *-tèla*.

164. *tên-na-te-leo*, one hundred. With *tên-* cf. P. 159. For *-na-* see list of formative elements. With *te-le* cf. P. 163, 165, 166, T. 164 (166).

165. *wen-tên-na-ta-leo*, four hundred. With *wen-* cf. P. 153. With *-tên-* cf. P. 159. For *-na-* see list of formative elements. With *-ta-le* cf. P. 163, 165, 166, T. 164 (166).

166. *tên-yo-tên-na-ta-leo*, one thousand. With *tên-yo-* cf. P. 159. With *-tên-* cf. P. 159. For *-na-* see list of formative elements. With *-ta-leo* cf. P. 163, 165, 166, T. 164 (166).

167. — — — —.

168. *ta-sôn-yáu*, to drink. *-sôn* = I. S., I., T. 168 *-su<sup>n</sup>*.

169. *ha-me-wé*, to run. *-me-* = I. S., I. 179 *-mi<sup>n</sup>* = T. 179 *-mä<sup>n</sup>*. With *-wé* cf. possibly I. S., I. T. 169 *-we-*.

170. *hi-we-êe*, to dance. Unexplained.

171. *ha-ya-ta-hoi*, to sing. *-ya-ta-* = T. 171 *-ya<sup>p</sup> a-*.

172. *ha-ya-tu-móo*, to sleep. *-ya-* = I. S., I., T. 172 *-ya-*.

173. *ha-tze-sa-yoi*, to speak. With *-tze-* cf. possibly J. 173 *-tse-*.

174. *hín-mo-oi*, to see. *-mo-* = I. S., I. T. 174 *-mu<sup>n</sup>*.

175. *ta-pe-tao*, to love. *-pe-tao* = P. 113 *-pe-tów*. With *-pe-* cf. the doubtful I. *-pe-*, to love.

176. *kíe-hu-nao*, to kill. *-hu-* = I. S., I., T. 176 *-hu-*.

177. *hel-en-é*, to sit. With *-en-* cf. possibly S. I. 177 *-ä<sup>n</sup>*.

178. *hel-wi-én*, to stand. *-wi-* = I. S., I., T. 178 *-wi-*.

179. *hel-o-fo-yé*, to go. Unexplained.

180. *na-hele-yao*, to come. *e-* = I. S., I. 180 *-i<sup>n</sup>* = T. 180 *-ä<sup>n</sup>*.

#### EXPLANATION OF PIRO AFFIXES

*a-*, a prefix accompanying adjectives, the same as I. S., I., T. *p' a-*. P. 3, 114, 115, 123.

*a-*, a prefix occurring with names of animals and with the word meaning egg, the same as I. S., I., T. *p' a-*. P. 97, 98, 99, 100, 101, 104, 107.

-a, a suffix accompanying numerals. See *u*.

*an-*, unexplained. P. 8.

-e, adjective suffix, the same as I. S., I., T. -e, -i. Cf. T. *wem tsula wae*, an alive dog, a dog is alive. P. 3, 122, 123, 129, 130.

-e, verbal suffix with the meaning "is," the same as I. S. -e, probably the same as the adjective -e above. P. 41, 46, 47, 48, 53, 54, 55, 57, 64, 66, 73, 74, 77, 78, 82, 83, 89, 92, 94, 95, 96, 97, 98, 99, 100, 101, 102, 108, 109, 133, 135, 148.

-e, used with possessive pronominal prefixes, probably the same as the preceding, the same as I. S., T. -e, I. -ey. P. 6, 7, 8, 9, 10, 11, 12, 13, 31.

-e, a part of the stem of the word according to the evidence of the other languages. P. 21, 23, 24, 83, 91 (?), 132.

-e, a suffix accompanying verbs. P. 177.

-êe, a suffix accompanying verbs. P. 170.

*el-em*, *el-a-m*, *el-en*-, possessive pronominal prefix of the first person singular. *el-*, unexplained. *-em-*, *-a-m*, *-en-* = I. S., I. *i"n-* = T. *a"n*. This prefix is invariably accompanied by the suffix -e. P. 6, 7, 8, 9, 10, 11, 12, 13, 31.

-em, unexplained. In the corresponding T. words *-enèma<sup>n</sup>* and *-anèma<sup>n</sup>* occur. P. 28, 33, 45.

-en, a suffix accompanying verbs. P. 178.

*ha-*, *hî-*, *hin-*, a suffix accompanying verbs. P. 169, 170, 171, 172, 173, 174.

-he, unexplained, possibly the same as -e. P. 25, 30, 86.

*hel-*, *-hel-* a prefix and infix accompanying verbs. P. 177, 178, 179, 180.

-hem, unexplained. In P. 17, 19, 26, 37, 48 this appears where I. S., I. have -a- and in 80 where I. has -ê. P. 14, 17, 19, 26, 27, 30, 37, 40, 48, 50, 80, 139.

-hôi, a suffix accompanying verbs. P. 171.

-i, unexplained. P. 85.

-ki-e, unexplained. P. 65, 103, 134.

*kie-*, a prefix accompanying verbs. P. 176.

-ke, unexplained. P. 85.

-la-, -le-, -lee, unexplained. P. 62, 63, 64, 65, 141.

-le, l-e, -de, unexplained. In P. 4, 44 it corresponds to I. S., I. -de, in P. 44 also to T. -le. P. 4, 44, 71, 87, 93, 147.

*l-e*, O. -le-, -ley, possibly locative. O. *y apol y ahuley*, in heaven. P. 75 *na-f'ol-ê*, earth. O. *nafoleguey*, on earth.

-lo-ê, l-u-ê, unexplained. P. 67, 68.

-m, the same as I. S., I. -m, T. -m-. P. 3 and 123 (cf. P. 122).

*ma-*, "very, much," according to Bartlett's note. P. 122, 125, 126, 128, 131, 132, 142.

*-me*, unexplained. P. 56, 107, 141, 146.

*-mo-*, infix accompanying verbs. P. 58 (?), 59.

*-moo*, suffix accompanying verbs. P. 172.

*-n*, apparently the same as T. *-nd*. P. 102.

*na-*, meaning he, she, or it, without a following *-e*. P. 61, 126, 132, 137, 138, 180.

*-na-*, suffix on numerals. See *-u*.

*-nao*, a suffix accompanying verbs. P. 176.

*na-* — *-e*, apparently meaning it is. P. 58, 59, 81, 114, 115, 116, 117, 118, 119, 125, 131.

*-na-e*, most of the corresponding words in T. have the suffix *-nd*. P. 16, 22, 43, 60, 61, 62, 79, 84.

*-na-he*, probably the same as *-na-e*. P. 106.

*-ne*, corresponding in almost every case with T. *-nd*. P. 2, 4, 9, 11, 20, 29, 34, 36, 105.

*ne-a-e*, probably the same as *-na-e*. P. 38.

*-nem*, corresponding in P. 15 and 18 with T. *-nema*<sup>n</sup>. P. 15, 18, 35, 90.

*-o*, suffix on numerals. See *-u*.

*-oi*, a suffix accompanying verbs, perhaps the same as *-hoi*. P. 174.

*-pe*, unexplained. P. 63, 144.

*-quay*, *-que*, a plural sign? P. 120, 138.

*-sa*, great. P. 32, 77.

*-sa-*, *-sā*, unexplained. P. 136, 137, 173.

*-sa-e*, *-tsa-é*, unexplained. P. 39, 124.

*ta-*, a prefix accompanying verbs. P. 168, 175.

*-tao*, *-tow*, found only in connection with the meaning affection. P.

113, 175.

*-te-le*, *-ta-le*, tens. This is the same as T. *-tela*. P. 163, 164, 165, 166.

*-u*, *-uh*, *-o*, *-a*, *-yu*, *-yo*, a suffix accompanying numerals. In the Tiwa language under certain syntactic conditions a vowel of the *a-o-u* series of somewhat obscure quality may be suffixed to the numerals, reminding one of the colloquial German *eina*, *zweia*, *dreia*, etc. We probably have this same suffix before us in the endings of the Piro numerals. *-yu* appears, preceded by *i-*, in P. 150 *eu-i-yu*, one (T. 150 *wema*), P. 151 *wi-yú*, two (T. 151 *witna*), P. 157 *hui-li-yú*, eight (T. *hwiliu*, *hwilia*). Assuming that P. *y* in these words represents merely a glide occasioned by preceding *i-* only the P. and T. words for eight exactly correspond, while the T. words for one and two contain infixes which the P. words do not con-

tain. *-yo* occurs in P. 159 *tên-yo*, ten, P. 162 *tên-te-yo*, twenty, P. 166 *tên-yo-tên-na-ta-leo*, one hundred. Elsewhere the numeral ten is *tên*-. Nothing corresponding to *-yo* has been found in the other Tanoan languages. The other P. numerals, except P. 158 *hua-weh*, nine, and P. 160 *tên-u-i*, eleven, suffix, *a*, *o*, *u*, *uh*. In P. 152 *môn-tu*, three, *u* seems to be a part of the stem. P. 152 *môn-tu* = I. 152 *patco*. I. S. 152 *patcua*, T. 152 *payua* show the suffix. *-t* of P. 152 is peculiar, the equation being P. *y* = I. S., I. *tc*, 'c = T. *y*. P. 153 *we-no*, four, P. 163 *we-na-te-leo*, forty, show the same suffix as I. S. 153 *wena*, four, T. 153 *wiänu*, four (also heard as *wiäna*). P. 154 *an-tao*, five, shows *o* comparable with *a* of I. S. 54 *p'antua*, five, T. 154 *p'anyua*, five. Here as in P. 152 P. *-t* corresponds to T. *y*, but I. S., I. agree with P., having *t*. P. 155 *ma-seu*, six, P. 156 *tsu-wuh*, seven, P. 163, 164, 165, 166 *-te-leo*, *-ta-leo*, tens, show the same suffix as do the T. forms *ma<sup>n</sup>Liu*, *ma<sup>n</sup>Lia*, six, *tsuu*, *tsua*, seven, *-telau*, *-telaa*, tens. *a-* of P. 164, 165, 166 *tên-na* is probably the same suffix as seen in T. *tênu*, *têna*, ten. There are therefore in the Piro vocabulary examples of the suffixing of a rounded vowel to each of the numerals except the numerals three and eight.

*-uh*, a suffix accompanying numerals. See *u*.

*-we*, *-o-e*, unexplained. P. 52, 120, 121, 125, 127, 142.

*-yao*, *-yau*, a suffix accompanying verbs. P. 168, 180.

*-ye*, probably the same as *-e*. P. 1, 51, 72, 104, 126, 128, 149.

*-yem*, comparable with *-em*, *-hem*. P. 43, 88.

*-yoi*, a suffix accompanying verbs. Cf. *-hoi*, *-oi*. P. 173.

*-yo*, a suffix accompanying numerals. See *-u*.

*-yu*, a suffix accompanying numerals. See *-u*.

In writing Piro, Bartlett commits inaccuracies which are common to many other vocabularies of Tanoan languages. The most noticeable are the writing of *s* for *ʌ* and the regular omission of *p'* and *k'*. In the following tabulation the individual phonetic elements occurring in the vocabulary of the language of Isleta del Sur, arranged in alphabetic sequence, are compared with the corresponding sounds of the vocabularies of the other languages. The number of times a spelling is found in Bartlett's vocabulary is indicated in parenthesis.

I. S.	I.	T.	P.
a	a	a, â	a (73), â (1)
ai	ai	ai	ay (1)
a <sup>n</sup>	a <sup>n</sup>	a <sup>n</sup>	an (2) a (1)

I. S.	I.	T.	P.
i, e, è	i, e, è	è, ä, à, ä <sup>n</sup>	i (2), e (5), a (2), en (1)
ɹ	ɹ	l	l (11)
e	e, ey	e, è, à	e (80), ê (89), è (1)
e	e	ie	a (1)
ea	ea	ea	yo (2)
e <sup>n</sup>	e <sup>n</sup>	ie <sup>n</sup>	an (1)
	ey		i (1)
		h	h (3)
h	h	h	h (1)
hw	hw	hw	hu (2), w (1)
	hw		h (1)
hw <sup>n</sup>	hũ <sup>n</sup>	hwi <sup>n</sup>	huaw (1)
i	i	i	i (14), e (3)
iaw	iuw	iuw	iaw (1), yao (1)
ie, iè, e, ee	ie, iè	ie, iä, ia	e (5), è (1)
i <sup>n</sup> , i <sup>a</sup>	i <sup>n</sup>	ä <sup>n</sup> , a <sup>n</sup>	e (14), i (1), ên (7), en (1)
iu	iu	iu	u (3), iw (1)
k	k	k	ki (5)
kw	kw	kw	ki (2), ku (1)
k <sup>h</sup>	k <sup>h</sup>	x	hi (6), ki (3), — (2), s (1?)
		xw	qu (1)
k'	k'	k'	— (3)
L	L	L	s (15), ts (3)
m	m	m	m (19)
mw	w	w	eu (1), u (1)
mmy	w <sup>n</sup>	zwi	wey (1)
n	n	n	n (59), — (1)
ny	ny	ny	y (2), ly (1?)
ny	y <sup>n</sup>		min' (1)
o	o	o	o (3), aw (1)
öa, ôa	öa, ôa, ûa	öa	ala (1), oulwa (1), ia (1), io (1)
			iu (1), o (3)
p	p	p	p (15), m (2), t (1)
p <sup>h</sup>	p <sup>h</sup>	p <sup>h</sup>	f (4), s (2), p (1), t (1)
p'	p'	p'	— (17), p (1)
s	s	s	s (1), ts (1)
t	t	t	t (1), q (1?)
tc	tc	y	t (1)
t	t	y	t (1)
t <sup>h</sup>	t <sup>h</sup>	t <sup>h</sup>	hr (2), tz (1), s (1)

I. S.	I.	T.	P.
t'	t'	t'	t (2)
'c	'c	ts	ts (8), tz (3), s (2)
tc'	tc'	ts'	ts (2), tz (2), s (1)
u	u	u	u (14), o (8), a (2), oo (1), û (1)
u <sup>n</sup>	u <sup>n</sup>	u <sup>n</sup> , u <sup>n</sup> u <sup>n</sup>	ou (2), u (1), ô <sup>n</sup> (1)
uu	uu	uu	eu (2), yu (1)
uy	ui	uy	iy (1)
	uya <sup>n</sup>		oe
û, ô	û, ô	û, ô, ôya	o (3), awa (1), ay (1), ee (1), e (1)
w	w	w	w (13), u (2), hu (2)
y	y	y	y (4), hi (2), i (1), — (1)

Of the 180 words contained in Bartlett's Piro vocabulary, 158, or 87 percent, have stems so nearly identical with the corresponding stems in the speech of Isleta del Sur, Isleta, and Taos, that the discrepancies may most easily be attributed to Bartlett's inaccurate orthography. Of the stems not explained by the Tiwa, four are elucidated by a comparison with the Jemez and Tewa languages, and six are borrowed from the Spanish. Therefore only twelve stems, or seven percent of the entire number, remain unexplained. The writer is confident that further study of Tiwa will explain these as well as the Piro affixes.

Bartlett's spellings do not enable us to determine with any degree of accuracy whether Piro stood nearer to the Isleta or to the Taos dialect of Tiwa, or whether it was a third Tiwa dialect differing from each of these as much as they differ from each other. Our results favor the latter assumption. In our vocabularies 59 Piro stems bear equal phonetic resemblance to Isleta del Sur, Isleta, and Taos; 29 Piro stems more closely resemble Taos; and 25 stems more closely resemble Isleta del Sur or Isleta.

Thus the very document on which Powell based his classification of Piro as a language distinct from Tiwa, when examined with the aid of comparative Tanoan vocabularies confutes that classification and confirms the evidence furnished by Pimentel and also by my informant, Marcos Pedraza, to the effect that Piro and Tiwa are the same language. Pimentel's grouping "Thaos ó Piro" is doubtless based on *old and trustworthy* information.<sup>1</sup>

<sup>1</sup> Pimentel's classification of the unrecorded and extinct language of the Suma as belonging to the same group is perhaps as reliable.



The writer suggests that the term Tiwa language be extended to include Piro, and proposes the following classification of the Tanoan languages. Inasmuch as the form of the numeral six is different in each of the three Tanoan languages as classified below yet does not perceptibly vary with the varying dialects of each of these languages, it may be well to employ that numeral as a classificatory handle, as the variant forms of the word meaning one hundred have been put to use by Brugmann in his grouping of the languages of the Indo-European family.

A. The Tiwa<sup>1</sup> or *Ma<sup>n</sup>Li* language, spoken by the (1) Taos, Picuris; (2) Sandia, Isleta, Isleta del Sur; (3) Piro.

B. The Tôwa<sup>2</sup> or *Mî<sup>n</sup>styî* language, spoken by the Jemez and Pecos.

C. The Tewa<sup>3</sup> or *Sî* language, spoken by the Hano, San Juan, Santa Clara, San Ildefonso, Nambe, Pojoaque, Tesuque, and Tano<sup>4</sup>.

The name Piro is not known to the Tewa and Jemez. The forms found in Spanish documentary sources are Piro, Piros, Pira. Marcos Pedraza of Senecú pronounced the word as in Mexican. Ponciano Luin of Isleta del Sur said that the Isleta del Sur and also the Piro form is *Piðù*. Among the notes of a friend on information obtained by him from the old cacique of Picuris I find the following: "Pecos pueblo, *Hîñquâ*; Pecos people, *Pelôñê*. Some of the Pecos people went south to El Paso, Texas."<sup>5</sup> The suffix *-îñê* is the same as Taos *-ena*. Have we not here a recollection of the name and history of the Piro?

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<sup>1</sup>The author suggests that *Tiwa* be used as the name of the language and that the dialects be designated: (1) Taos; (2) Isleta; (3) Piro.

<sup>2</sup>The Jemez and Pecos speak of their language as *tôwa ts' à' àtu<sup>n</sup>*, the home language (*tôwa*, home + *ts' à' à*, people + *tu<sup>n</sup>*, talk).

<sup>3</sup>The Tewa call their language *têwa tu<sup>n</sup>di*, the home language, the native language (*têwa*, home, native + *tu<sup>n</sup>di*, language).

<sup>4</sup>The Tano, who formerly lived about Rio Santa Fé and Rio Galisteo, spoke the same language as the Tewa.

<sup>5</sup>Used by courtesy of Mr H. J. Spinden.